

INTENDED USE

Leishman's Stain is used in the general differentiation of blood cells for malaria and trypanosomes in prepared slides from clinical specimens.

SUMMARY AND EXPLANATION

Leishman's Stain was discovered in 1901 and is used for staining blood smears. It is generally used to differentiate and identify leucocytes, malarial parasites and trypanosomes.

PRINCIPLE OF THE TEST

Leishman's Stain is based on a methanolic mixture of Polychrome Methylene Blue and Eosin. The methanolic stock solution is stable and also serves the purpose of directly fixing the smear thereby eliminating a prefixing step.

MATERIALS PROVIDED

- PL.7047 Leishman's Stain 500 ml

Per 100ml solution:

- Leishman's Stain contains 0.1g of Leishman's Stain powder.

MATERIALS REQUIRED BUT NOT PROVIDED

- Glass slides
- Inoculating loop
- Microscope
- Immersion Oil PL.396

STABILITY AND STORAGE

Leishman's Stain should be stored at 15-25°C in its original container. Product stored under these conditions will be stable until the expiry date shown on the product label.

PRECAUTIONS

- For In Vitro Diagnostic Use only.
- For professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Microbial contamination may decrease the accuracy of the staining.
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Samples should be processed in the correct containment level conditions.
- Dispose of all material in accordance with local regulation.

TEST PROCEDURE

- Prepare a smear on a clean glass slide and allow to air dry
- Apply Leishman's Stain for 1 minute.
- Add double the volume of distilled water to the slide and mix by swirling.
- Allow the diluted stain to act for 5-10 minutes.
- Wash the slide with distilled water or phosphate buffer (pH 7.0) for 1 minute until the slide appears pink.
- Blot gently and air-dry.
- Examine using a microscope.

QUALITY CONTROL PROCEDURE

Internal quality control of the Leishman's Stain must be performed regularly on known reference material.

Recommended Quality Control:

- Positive control – a proven positive
- Negative control – a proven negative

INTERPRETATION OF RESULTS










Erythrocytes	Yellow-red
Lymphocyte nuclei	Deep purple
Lymphocyte cytoplasm	Light blue
Eosinophil nuclei	Blue
Eosinophil granules	Red-orange
Eosinophil cytoplasm	Blue
Basophil nuclei	Purple-dark blue
Basophil granules	Dark purple-black
Polymorph nuclei	Dark purple
Polymorph granules	Red-purple
Polymorph cytoplasm	Pale pink
Platelet granules	Purple
Malarial parasites	Red with blue cytoplasm
Trypanosome chromatin	Red

LIMITATIONS OF THE PROCEDURE

- Only experienced personnel should carry out the interpretation of stained slides.
- Read prepared slides as soon as possible after staining. Failure to do so may affect the results.

REFERENCES

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- Crookham, J. and Dapson, R. Hazardous Chemicals in the Histopathology Laboratory, 2nd ED, 199, Anatech.
- Gurr, E. A. Practical Manual of Medical and Biological Staining Technique. 1953
- Isenberg HD, Ed. Clinical microbiology procedures handbook, Vol I Washington, DC: ASM Press, 1992.
- Leishman, W.B. (1901) Note on a simple and rapid method of producing Romanowsky staining in malarial and other blood films. *Br. Med. J.* 2, 757-8.
- Lowrance, B.L., Reich, P. and Traub, W.H. (1969). *Journal of Applied Microbiology* 17:923-924.
- Murray, P. R., Baron, E. J., Jorgensen, J. H., Pfaller, M. A. and Tenover, R. C. (ed.), Manual of clinical microbiology, 8th edition. ASM Press, Washington, DC. 2003
- World Health Organisation. Basic Laboratory Methods in Medical Parasitology (1991). ISBN 92 4 154410 4.


	= Use by
	= Lot number
	= Catalogue number
	= Manufacturer
	= Authorized Representative in the European Community
	= Contains sufficient for <n> tests
	= In vitro diagnostic medical device
	= Temperature limitation
	= Consult instructions for use



Advena Ltd. Tower Business Centre, 2nd Floor,
Tower Street, Swatar, BKR 4013, Malta.

HAZARDS IDENTIFICATION

Please refer to Safety Data sheets for full text for all hazard and precautionary statements.

	PL.7047	H225, H319, H332, H371 P210, P270, P280, P370+P378, P308+P311
DANGER		

